

Claims

[c1] We claim as our invention:

1. A process for installing a grip on a shaft, the grip having a hollow interior with a first diameter, the process comprising:

flowing a gaseous medium into the grip to expand the hollow interior of the grip from the first diameter to a second diameter;

moving the grip toward a butt end of a shaft, at least a portion of the butt end of the shaft having a moisture activated tape thereon;

misting the moisture activated tape with a fluid prior to placement of the grip over the tape;

mating the butt end of the golf club shaft with the expanded hollow interior of the handgrip.

[c2] 2. The process according to claim 1 wherein the grip has a grip strength of at least eighteen foot-pounds one minute after complete attachment of the handgrip to the butt end of the shaft.

[c3] 3. The process according to claim 1 wherein the fluid is misted at a rate of at least eleven milliliters per minute.

- [c4] 4. The process according to claim 1 wherein the gaseous medium is flowed into the grip at a pressure of at least forty pounds per square inch.
- [c5] 5. The process according to claim 1 wherein the grip has a grip strength of at least fifty-five foot-pounds one minute after complete attachment of the handgrip to the butt end of the shaft.
- [c6] 6. A process for installing a handgrip on a golf club shaft, the handgrip having a hollow interior with a first diameter and an open end, the golf club shaft having a butt end, the process comprising:
placing the golf club shaft in a retention device with the butt end facing in a first direction, at least a portion of the butt end of the golf club shaft wrapped in a double sided water activated grip tape, the double sided water activated grip tape having an outer water absorptive adhesive layer, a central saturated paper layer and an inner water absorptive adhesive layer adhered to at least a portion of the butt end of the golf club shaft;
mounting the handgrip in a moveable attachment mechanism, the handgrip lying in a horizontal plane with the golf club shaft, the open end of the handgrip facing the butt end of the golf club shaft, a top end of the handgrip affixed to an inflation device of the moveable attachment mechanism, a barb of the inflation device inserted in an

aperture of the top end of the handgrip;
inflating the handgrip to a second diameter by introduction of air from an air source through the barb and into the hollow interior of the handgrip;
misting water on the outer water absorptive adhesive layer of the double sided water activated tape from a nozzle of a misting device of the moveable attachment mechanism, the nozzle positioned in front of the open end of the handgrip and supplied from a tube in flow communication with a water source;
moving the handgrip over the butt end of the golf club shaft simultaneously with the misting of the outer water absorptive adhesive layer of the double sided water activated tape, the handgrip inflated to the second diameter;
ceasing the misting water and flowing of air once the handgrip is completely attached to the butt end of the golf club shaft.

- [c7] 7. An apparatus for applying a handgrip to a butt end of a golf club shaft, the apparatus comprising:
a shaft retention device having a body with an aperture therethrough for placement of a shaft therein;
a moveable attachment mechanism, the moveable attachment mechanism comprising a grip attachment device and a misting device, the grip attachment device having an inflation device with a barb, the misting device

comprising a nozzle for dispensing a fluid onto a tape on a shaft;
a fluid source in flow communication with the misting device; and
a gaseous source in flow communication with the inflation device.

- [c8] 8. The apparatus according to claim 7 wherein the fluid source comprises a container with water.
- [c9] 9. The apparatus according to claim 7 wherein the gaseous source comprises a container of compressed air.
- [c10] 10. The apparatus according to claim 7 wherein the misting device further comprises a support structure which positions the nozzle forward of a grip attached to the barb.
- [c11] 11. An apparatus for applying a handgrip to a butt end of a golf club shaft wrapped in a double-sided water activated tape, the apparatus comprising:
a base having a first end and a second end;
a shaft retention device having a body with an aperture therethrough for placement of a shaft therein, the shaft retention device positioned at a first end of the base, the shaft retention device extending outward from the base, the aperture of the body positioned within a first hori-

zontal plane parallel to the base;
a moveable attachment mechanism, the moveable attachment mechanism comprising
a grip attachment device comprising a first base block, a second base block, a first guiding rod, a second guiding rod, an arm and an inflation device with a barb, the first and second base blocks connecting the grip attachment device to the base, the first and second base blocks extending outward from the base, the first guiding rod slideably positioned through an aperture in the first base block, the second guiding rod slideably positioned through an aperture in the second base block, the first and second guiding rods attached to the arm, the barb attached to the arm between the attachment of the first and second guiding rods,
a misting device comprising a nozzle for dispensing water onto a tape on a shaft and a support structure for positioning the nozzle forward of a grip attached to the barb and in a second horizontal plane above the first horizontal plane;
a water source in flow communication with the misting device; and
a source of compressed air in flow communication with the inflation device.

[c12] 12. The apparatus according to claim 11 wherein the

arm and the misting device move simultaneously from the second end of the base toward the first end.

[c13] 13. The apparatus according to claim 11 wherein the misting device dispense water from the nozzle at a rate of at least eleven milliliters per minute.

[c14] 14. The apparatus according to claim 11 wherein the inflation device provides compressed air at least forty pounds per square inch.

[c15] 15. A golf club comprising:
a golf club head;
a shaft having a butt end and a tip end, the tip end of the shaft attached to the golf club head, a portion of the butt end of the shaft wrapped in a double-sided water activated tape;
a grip attached to the butt end of the shaft over the double-side water activated tape;
wherein the grip has a grip strength of at least fifty-five foot-pounds one minute after installation of the grip onto the shaft.

[c16] 16. The golf club according to claim 15 wherein the double-side water activated tape has a gap of between 0.10 inch to 0.25 inch between a first edge and a second edge of the double-sided water activated tape.

